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09/469,307	12/22/1999	JOONG-KYU CHOI	P-056	4821

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EXAMINER	
AMSBURY, WAYNE P	
ART UNIT	**PAPER NUMBER**
2161	

DATE MAILED: 08/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/469,307	CHOI, JOONG-KYU	
	Examiner	Art Unit	
	Wayne Amsbury	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-25 is/are pending in the application.

4a) Of the above claim(s) 1-8,10-14 and 21-25 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 9 and 15-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 06 July 2005 is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

CLAIMS 1-25 ARE PENDING

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. **Applicant's arguments filed 7/6/05 have been fully considered but they are not persuasive.**

The amendments to the claims have introduced new matter and changed the invention claimed, but they have not solved the fundamental problem of providing an adequate description. In particular, synchronization is now a limitation only in claims 9 and 15-20, but the remarks of the previous action still apply and are incorporated below.

3. The amendment filed 7/6/05 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Subscripts added to the discussion, particularly at page 5 and the drawings.

The change of *header bit* to *header bit* ***field***.

Applicant is required to cancel the new matter in the reply to this Office Action.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the use of fields rather than bits for header for header and data components of FIG 3 must be shown or the feature(s) canceled from the claim(s). **No new matter should be entered.**

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. Newly submitted **claims 1-8, 10-14, 21-25** are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The removal of the application to database synchronization from these claims broadens their scope to include any paradigm in which data is compared and transmitted over a network, and does not involve database synchronization at all, as noted above and detailed in the previous action and below.

As to **claims 13 and 25**, the amendments of 7/6/05 change *bit* to **bit field** in these claims, which is of very different scope. The transmission of fields of data is a distinct invention from transmission of individual bits.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits.

Accordingly, claims 1-8, 10-14, 21-25 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

6. **Remarks:** The synchronization of two databases can be effected by transmission of the differences from one to another, generally changes since an earlier synchronization. However, suppose that databases A, B, and C are to be synchronized, where B and C undergo independent and distinct local changes. In that case, transmission of the changes in B to A and the changes in C to A leaves no pair synchronized. Transmission in the other direction(s) is required.

In the terminology of the Specification, there are two local memories at each of a plurality of network elements (NE), and these communicate data to an element management system (EMS). [See FIG 2.] To the extent that the examiner can determine, the two local memories of an NE are a *common memory (CM)* that contains locally current data and perhaps (change) status, and a *sync-related memory (RM)* that contains data and status from a previous synchronization. These are apparently the NEi_CM and the NEi_RM of FIG 2 for i=1...n. The EMS contains corresponding EMS_RMi for i = 1...n and a single EMS_CM. This characterization is based on statements such as the one at page 3, lines 3-4: *each NE includes a common memory in which DB information and alarm state information are* ***provided****; and a sync-related memory of the same pattern as the common memory for maintaining DB identity with the EMS [emphasis added].*

The term *provided* is taken here for the sake of compact prosecution to indicate DB changes, since there is no other clear reference to changes that might require synchronization.

The operation of the system as described in the Specification includes a loop [FIG 4; page 5 lines 17-22] that transmits changed data from each NEi_CM to both the corresponding EMS_RMi and to NEi_RM, more or less concurrently. One can infer that the intent is to transmit NEi_RM = NEi_CM at this stage to EMS_RMi. At another stage of the overall process [page 5 line 23 to page 6 line 4], the resulting changes {EMS_RMi} are copied into EMS_CM. At that point, EMS_CM contains all of the

changes at NEi for i = 1...n since the last synchronization cycle, but no other component of the system does.

The examiner appreciates amendments to the claims that address the subscript problems to some extent, but the fundamental issue remains:

As noted above, these actions do not synchronize any pair of databases in the system, as there are at least three elements NEi. This contradicts the clear intent of the Title, Abstract, much of the Specification, and the preamble of claims previously submitted.

There are also serious difficulties in interpretation and enablement due to the failure to use appropriate subscripts and distinguish singularities and pluralities, and other elements of the disclosure.

In particular, the EMS is taken to be the system as depicted in FIG 2, involving multiple NEi_RM and NEi_CM and EMS_RMi components by its nature.

The examiner respectfully suggests that a C.I.P. could be used in order to clarify the Specification and enable the claims.

7. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms that are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are:

The failure to use subscripts appropriately, particularly in conjunction with locutions such as "*the RM of the EMS in accordance with the corresponding header*", where the header as depicted in FIG 3 shows no elements that distinguish both particular NE components and block components of the NE_DB.

Furthermore, a header **bit** as shown in FIG 3 and the original corresponding discussion cannot distinguish more than two items, being either 0 or 1 in value. Similarly, the data **bit** can contain only a 0 or 1, which is not a block of data, as it is commonly understood in the art.

The use of *synchronization* when no synchronization is completed, as discussed above, contrary to such passages as *thereby obtaining a database synchronization* at page 6 line 11 and elsewhere.

8. **Claims 13 and 25** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The amendment of 7/6/05 fails to fully address the problems associated with FIG 3.

9. **Claims 9 and 15-20 are rejected under 35 U.S.C. 112, first paragraph**, as failing to comply with the enablement requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

These claims involve synchronization and/or resynchronization of an EMS. As noted above, the Disclosure fails to support synchronization for such a system.

10. **Claims 1-25 are rejected under 35 U.S.C. 112, first paragraph**, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The failure to describe synchronization, as it is understood in the art, or to clearly set forth the details of the process called synchronization in the Disclosure is discussed in detail above.

11. **Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph**, as failing to set forth the subject matter which applicant(s) regard as their invention. Evidence that claims 1-25 fail(s) to correspond in scope with that which applicant(s) regard as the invention can be found in the Disclosure of 12/29/1999.

In that paper, applicant has stated repeatedly that the invention is regarded as database synchronization, and in particular, the Field of the Invention and the object of the invention in the SUMMARY is stated to be: *a method for database synchronization between an EMS and NEs (Network Elements).* This statement indicates that the invention is different from what is defined in the claim(s) because none of the claims synchronize databases, as discussed in detail above.

12. **Claims 9 and 15-20** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

None of these claims are clearly related to database synchronization as it is understood in the art, and thus it is not clear how they relate to the other elements of the claims.

As to claim 15, it is not clear how to interpret *resynchronization* when there is no synchronization to begin with.

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne Amsbury whose telephone number is 571-272-4015. The examiner can normally be reached on M-F 6-18:30 FIRST WEEK.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

WPA

WAYNE AMSBURY
PRIMARY PATENT EXAMINER